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Determinants of business sustainability of women entrepreneurs

Amizahanum Adam¹+

Wan Razazila Wan Abdullah²

Enny Nurdin Sutan Maruhun³

D Irda Syahira Khair Anwar⁴

D Ahmad Saiful Azlin
Puteh Salin⁵

1233.45 Faculty of Accountancy, Universiti Teknologi MARA, Perak Branch Tapah Campus, 35400 Tapah Road, Perak, Malaysia.

Tapan Campus, 35400 Tapan Koda Email: <u>amiza592@uitm.edu.my</u>

²Email: <u>wanrazz@uitm.edu.my</u> ³Email: <u>ennyn786@uitm.edu.my</u> ⁴Email: <u>irdas360@uitm.edu.my</u>

Email: ahmad577@uitm.edu.my



ABSTRACT

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Keywords

Business sustainability COVID-19 Entrepreneurship Family support Pandemic crisis Resource-based view theory SMEs Women entrepreneur. The issue of women in business or women in entrepreneurship has attracted much attention from researchers and practitioners in recent years, particularly in developing countries. This is due to the ability of women entrepreneurs to make a significant contribution to economic growth, country development, and escaping poverty. However, what determines their critical success factors as women entrepreneur is still under research. Thus, the purpose of this study is to examine the determinants of business sustainability specifically among women entrepreneurs. This study is original as it focuses on the business performance of women entrepreneurs during the pandemic crisis. This research used a market survey among women entrepreneurs as its research design and data collection. Seven constructs, comprised of six independent variables and one dependent variable, were used in the study. The independent variables are competency, marketing capability, financing resources, technology usage, motivation, and family support, while the dependent variable is business sustainability. This study used Resource-based View Theory (RBV) as its foundation for the research framework. This study finds that only family support influences business sustainability, while the other construct does not provide any conclusive evidence. This empirical study suggests that more support and training need to be provided by government agencies to ensure the survivability of women entrepreneurs in Malaysia.

Contribution/Originality: This study is original as it specifically examines the business performance of women entrepreneurs during the pandemic crisis. Many prior studies on women's entrepreneurship were conducted before the health crisis occurred across the globe.

1. INTRODUCTION

The COVID-19 pandemic has had a profound impact on business and industry, including Small and Medium Enterprises (SMEs) worldwide. The crisis has resulted in significant challenges and disruptions for SMEs across various sectors. Many SMEs were forced to temporarily or permanently close their businesses due to lockdowns and restrictions. Hence, SMEs faced disruptions in their supply chains, with delays in receiving raw materials, components, and finished goods. This affected production schedules, inventory management, and the ability to meet

customer demands. Karim, Nawawi, and Salin (2018) suggest that undisrupted inventory management is important to ensure smooth production and avoid losses due to stock outs that lead to customer dissatisfaction.

While many studies have been conducted on the impact of the pandemic crisis on businesses and SMEs, the study that examines the impact of the crisis on women's entrepreneurship is not well known. For developing countries like Malaysia, the participation of women in business generally and in SMEs in particular is important due to socio-economic reasons. Women often participate in business to achieve economic independence. Starting their own businesses allows them to generate income, build wealth, and have greater control over their financial future. Besides, many women participate in business to support their families and escape poverty. SMEs can offer income-generating activities for individuals who may not have access to formal employment. This can be particularly relevant in economies with a significant informal sector or in rural areas where formal job opportunities may be limited.

In addition, women entrepreneurs also have unique characteristics in certain ways. Women entrepreneurs may face biases and stereotypes that can impact how they are perceived and supported in the entrepreneurial ecosystem. They may encounter problems related to credibility, discrimination based on gender, and the perception of their competence. Men and women entrepreneurs may have different motivations and objectives when starting and running their businesses. Research suggests that women entrepreneurs often prioritize work-life balance, making a positive impact on their communities, and aligning their businesses with their personal values. Men may prioritize financial growth, market dominance, and achieving competitive advantages. Individuals who have limited access to traditional employment opportunities or face economic disadvantages may start their own businesses, leading to increased income and improved living conditions.

Due to these differences and gaps, it is interesting to examine the determinants that may influence the ability of women entrepreneurs to survive in business. Fundamentally, this study intends to examine the determinants of business sustainability, specifically among women entrepreneurs. This study is original as it specifically examines the business performance of women entrepreneurs during the pandemic crisis. Many prior studies on women's entrepreneurship were conducted before the health crisis occurred across the globe.

This study contributes in several ways. First, the findings of this study will furnish valuable knowledge to government agencies and policy makers to assist women entrepreneurs in facing problems and challenges in their business operations. Second, the women entrepreneurs themselves are able to explore and understand the influential factors that can enhance their resilience, motivation, and hard work to remain optimistic and sustained in the business competition. Finally, the findings of this study will add to the theoretical framework and review of literature on the key determinants that can drive excellent and exceptional business performance, in particular among women entrepreneurs.

This article is organized as follows: The next section is a review of the literature on Malaysian SMEs and women entrepreneurs, followed by the development of hypotheses. The methodology of the study is in Section 4, while data analysis and discussion are in Section 5. The final section is a conclusion.

2. LITERATURE REVIEW

2.1. Overview of SMEs in Malaysia

Small and Medium Enterprises or well-known as SMEs play a crucial role in Malaysian economic development. They form a vibrant and diverse sector that contributes largely to national employment, innovation, and the overall dynamism of the economy. The Malaysian government has launched a number of programmes and policies to assist SMEs' expansion and sustainability as a result of realizing in recent years how important they are.

SMEs are typically defined based on their size, annual turnover, and number of employees. In Malaysia, the SME definition is based on the number of full-time employees and annual sales turnover. According to the SME Corporation Malaysia, microenterprises have fewer than five employees or less than RM 300,000 in annual sales;

small enterprises have between five and 50 employees or annual sales of RM 300,000 to RM 3 million; and medium enterprises have between 51 and 150 employees or annual sales of RM 3 million to RM 20 million.

SMEs form the backbone of the Malaysian economy, accounting for a large share of employment and Gross Domestic Product. They provide employment opportunities for a large number of people, particularly in sectors such as manufacturing, services, and retail. SMEs also contribute to economic growth by fostering entrepreneurship, innovation, and productivity improvement. Despite their significant contribution, SMEs in Malaysia face various challenges that hinder their growth and sustainability. Access to financing is often cited as one of the major challenges, with SMEs finding it difficult to obtain affordable capital for expansion or investment in technology and innovation. Other challenges include limited access to markets, a lack of skilled talent, regulatory burdens, and inadequate infrastructure support.

2.2. Women Participation in SMEs

The participation of women in entrepreneurship and SMEs is known as a vital determinant of economic development, innovation, and social development (Dzisi, 2008; Weiss, Anisimova, & Shirokova, 2019). Women entrepreneurs bring unique perspectives, skills, and contributions to the business world, making a significant impact on SMEs and the overall economy (Setini, Yasa, Supartha, Giantari, & Rajiani, 2020). Women entrepreneurs in SMEs play a crucial role in achieving gender equality and empowering women economically. Entrepreneurship provides women with opportunities to pursue their passions, utilize their skills, and gain financial independence. By starting and managing their own businesses, Setini et al. (2020) found women can break gender barriers, challenge societal norms, and create pathways for other women to follow.

Women-led SMEs contribute to job creation and employment opportunities (Dzisi, 2008) both for women and men. By starting and expanding their businesses, women entrepreneurs generate employment and stimulate economic growth. They often prioritize creating a supportive work environment that encourages diversity, inclusivity, and equal opportunities, fostering a positive impact.

Despite the significant contributions of women entrepreneurs in SMEs, they face several challenges that can limit their growth and success. Women entrepreneurs often encounter difficulties in accessing capital and financial resources (Khan, Salamzadeh, Shah, & Hussain, 2021). Factors such as limited collateral, discriminatory lending practices, and biases can hinder their ability to secure financing for business startups and expansion. Improving access to finance and developing targeted financial programs can help address this challenge.

Women entrepreneurs often face the additional challenge of balancing their business responsibilities with family and caregiving obligations. According to research by Kim and Ling (2001) women entrepreneurs and women employees both experience work-family conflict. Lack of support systems, limited access to affordable childcare, and societal expectations can make it more challenging for women entrepreneurs to manage work-life balance. Policies and programs that support flexible working arrangements and provide family-friendly support can alleviate this challenge.

Women entrepreneurs may encounter gender stereotypes, biases, unequal treatment and poor ethical treatment, in the business world. Prior literature shows that many frauds and unethical practices are committed by irresponsible people due to poor income and financial pressure (Alias, Nawawi, & Salin, 2019; Nawawi & Salin, 2018). In the public sector, government inefficiencies in resource allocation will slow down the development of the nation (Shariman, Nawawi, & Salin, 2018) which will also have negative consequences for the success of women entrepreneurs. Overcoming societal and cultural norms that limit women's roles in entrepreneurship and fostering gender-inclusive policies and practices are essential to creating an environment that enables women entrepreneurs to succeed. Therefore, entrepreneurs, particularly women entrepreneurs, should conduct their business activities with honesty, justice, accountability, and transparency (Shahar, Nawawi, & Salin, 2020). Due to these problems, it is interesting to explore and investigate the factors that influence the business success of women entrepreneurs from

the perspectives of competency, marketing capabilities, sources of financing, technology usage, motivation, and family support.

3. HYPOTHESES DEVELOPMENT AND THEORECTICAL FRAMEWROK

Entrepreneurial competence encompasses a wide range of skills, knowledge, and capabilities that entrepreneurs possess, enabling them to identify opportunities, take calculated risks, and effectively manage their ventures. Entrepreneurial competence fuels innovation, enabling businesses to introduce new products, services, and processes that meet evolving market demands. Women in Ghana, for example, venture into producing a product that requires them to be innovative and skilled (Dzisi, 2008). They were able to find a niche segment, which is preschool children, as their revenue stream. In this context, competent entrepreneurs possess the ability to recognize and exploit market gaps, driving their ventures towards a competitive advantage.

Prior studies also consistently demonstrate that companies with excellent entrepreneurial competence are more likely to be innovative and gain a sustainable competitive edge, leading to improved business performance. Based on this argument, the following hypothesis is suggested:

H: There is a positive relationship between entrepreneurial competence and business sustainability.

Marketing capabilities encompass the collective knowledge, skills, and resources within an organization that enable it to effectively identify, anticipate, and respond to market needs. Marketing capabilities foster a market-oriented approach, enabling organizations to understand customer needs, desires, and preferences. Setini et al. (2020) suggested that SMEs must immediately enhance their marketing expertise via electronic social media. SMEs also need to comprehend digital marketing strategies in accordance with the goals and qualities of their products and be aware of strategies for increasing visitors, followers, and customers.

A customer-focused strategy, supported by effective marketing capabilities, facilitates the development and delivery of superior value propositions that resonate with the target market. Research consistently indicates a positive relationship between marketing capabilities, market orientation, and customer satisfaction, as studied by Khizindar and Darley (2017). Satisfied customers, in turn, drive business performance through repeat purchases, positive word-of-mouth, and increased loyalty. The next hypothesis is:

 H_2 : There is a positive relationship between marketing capabilities and business sustainability.

Financial resources encompass the monetary assets, funding, and capital available to organizations to support their operations, investments, and growth. Financial resources provide organizations with the necessary capital to invest in critical areas such as research and development, marketing, infrastructure, and talent acquisition.

Adequate financial resources allow firms to seize growth opportunities, expand operations, enter new markets, and develop innovative products or services. Although it is acknowledged that women in many developing nations, such as Pakistan, find it difficult to receive credit for their entrepreneurial endeavors, women need to discover answers and have simple access to funding for their companies (Khan et al., 2021). According to Afza and Amir Rashid (2009) external factors such as political, economic, and social issues have a substantial impact on women entrepreneurs practically in every field.

Research consistently demonstrates a positive relationship between financial resources and business growth, with well-capitalized organizations typically outperforming their competitors in terms of revenue growth, market share, and expansion. Based on this argument, the next hypothesis is:

H_s: There is a positive relationship between financing resources and business sustainability.

Technology usage refers to the adoption and integration of technological tools, systems, and processes within organizations to enhance operational efficiency, facilitate innovation, and gain a competitive edge. Technology usage enables organizations to streamline their operations, automate manual tasks, improve overall productivity and efficiency, and currently have to become major parts of firm strategy to remain competitive in the market (Suhaimi, Nawawi, & Salin, 2017). Advanced software systems, robotics, and automation technologies can reduce

human error, optimize resource allocation, and enhance process efficiency. According to Setini et al. (2020) an entrepreneur needs to highlight their product's distinctive design with high quality and quick creativity because technology makes products easily imitated.

Prior scholars consistently demonstrate that organizations that effectively leverage technology experience higher levels of productivity and operational efficiency, leading to improved business performance (Salin, Hasan, Kamarudin, & Mad, 2023). This is consistent with earlier research, such as that of Azmi (2017) which emphasized the accessibility of technological resources for the quick or simple production of high-quality goods.

H: There is a positive relationship between technology usage and business sustainability.

Entrepreneur motivation refers to the internal factors that drive individuals to pursue entrepreneurial endeavors and sustain their commitment towards achieving business success. According to Amorós, Cristi, and Naudé (2021) people who are pushed into entrepreneurship are frequently characterized as being motivated by necessity, while those who are pulled into entrepreneurship are characterized as being motivated by opportunities.

According to Alam, Jani, and Omar (2011) internal motivation is a crucial contributor to the success of Malaysian women entrepreneurs. Motivated entrepreneurs exhibit perseverance and resilience in the face of challenges and setbacks. The inherent drive and determination propel entrepreneurs to persistently pursue their goals, learn from failures, and adapt their strategies. Research consistently demonstrates that motivated entrepreneurs are more likely to bounce back from adversity, leading to improved business performance and increased chances of long-term success.

Motivated entrepreneurs are more inclined to exhibit innovative and creative thinking. Entrepreneurial motivation encourages individuals to identify market gaps, develop unique solutions, and take calculated risks. Motivated entrepreneurs are more likely to embrace change, challenge the status quo, and explore new opportunities. Their drive for innovation positively influences business performance by driving product or service differentiation, attracting customers, and gaining a competitive advantage. Based on all the arguments, the next hypothesis is then proposed:

H_s: There is a positive relationship between entrepreneur motivation and business sustainability.

Family support for entrepreneurs refers to the assistance, encouragement, and resources provided by family members to foster entrepreneurial endeavors. Family support provides emotional backing and resilience to entrepreneurs. Understanding, encouragement, and belief from family members play a vital role in bolstering an entrepreneur's confidence and motivation. Research suggests that entrepreneurs who receive emotional support from their families are better equipped to overcome challenges, maintain mental well-being, and persevere in the face of adversity, thereby positively influencing business performance. Previous findings from Azmi (2017) reported that 56.7% of the respondents agreed that the biggest motivator for Muslim women entrepreneurs in Asian Pacific SMEs is familial support. Furthermore, Alam et al. (2011) and Kim and Ling (2001) concluded that family support must be essential for the success of female entrepreneurs. Thus, the following hypothesis is established:

H_s: There is a positive relationship between family support and business sustainability.

3.1. Theoretical Framework

This study used Resource-based View Theory (RBV) as its foundation for the research framework. Based on Barney (2001) resources are critical to supporting firm performance by improving its efficiency and effectiveness. In addition, these distinct and unique resources will assist businesses in developing tools for competitive advantage (Gueler & Schneider, 2021) and, hence, survive in business (Adam, Abdullah, Maruhun, Anwar, & Salin, 2022). Our study argued that selected business resources such as entrepreneur's competency, marketing capability, financing resources, technology usage, motivation, and family support are some valuable resources and capabilities to gain sustained competitive advantage in business ecosystems.

4. RESEARCH METHODOLOGY

4.1. Data Collection Method

A quantitative research design was used to achieve the research objective. This design enables the collection of numerical data, which can then be statistically analyzed to yield meaningful conclusions. This design is appropriate for this study because it allows for the greatest possible reach of women entrepreneurs in Malaysia. This method allows for the provision of a general background for women entrepreneurs. It also assists the researcher in identifying potential determinants that will affect their business throughout the pandemic. This is expected to be met by using statistical analysis, which allows for data generalization that closely represents the total population (Kumar, Abdul Talib, & Ramayah, 2012).

4.2. Data Collection Instrument and Development

The primary method of data collection for this study is a survey questionnaire. This is a suitable data collection mechanism, as the study of women entrepreneurs is considered descriptive and explanatory in nature. It is also an efficient tool that is less expensive and time consuming (Sekaran & Bougie, 2016) as the researchers expected to use the online platform to distribute the questionnaire. Our study differs from many prior studies, such as Mohd Radzi, Mohd Nor, and Mohezar Ali (2017) and Alam et al. (2011) which only concentrated on specific small entrepreneurship schemes and geographic locations, while our study contains more diverse entrepreneurs located across the country.

Table 1 lists the seven constructs, which are comprised of six independent and one dependent variable used in the study. The independent variables are competency, marketing capability, financing resources, technology usage, motivation, and family support, while the dependent variable is business sustainability. To ensure content validity, all items were developed using previous concepts, theories, and research relevant to the Malaysian context.

Table 1. The elements of business sustainability for women entrepreneurs.

Constructs	Definition	References
Entrepreneurs' skills	The abilities, traits, and competencies that are necessary for women to successfully start, manage, and grow their own businesses.	Mohd Radzi et al. (2017) and Ahmad, Suseno, Seet, Susomrith, and Rashid (2017)
Marketing capabilities	The skills, strategies, and resources that are specific to promoting and growing businesses led by women, considering their unique challenges, needs, and target audiences.	Kimosop, Korir, and White (2016); Kotler and Keller (2012) and Chin, Lo, and Ramayah (2013)
Source of funds	The source of funding for women entrepreneurs can come from various channels, such as personal savings, loans from family and friends, venture capital firms, angel investors, crowdfunding platforms, grants, or government programs specifically designed to support female-led businesses. These funds are required to start and grow businesses to achieve financial independence and success.	Khizindar and Darley (2017); Welsh, Kaciak, Trimi, and Mainardes (2017) and Kanapathipillai and Ferdous Azam (2019)
Use of technology	The utilization of digital tools and platforms to enhance the productivity, efficiency, and growth of women-led businesses. For example, the use of smartphone applications for virtual networking and business management, such as mobile banking apps, which help facilitate smooth financial transactions	Jasra, Khan, Hunjra, Rehman, and Azam (2011); Beninger, Ajjan, Rania, and Crittenden (2016) and Syed Abidur, Taghizadeh, Ramayah, and Didarul Alam (2017)

Constructs	Definition	References	
	and connect with potential clients.		
Motivation	The driving force that empowers women entrepreneurs to pursue their business goals, overcome challenges, and accomplish success while making a positive impact.	Reijonen and Komppula (2007); Naser, Mohammed, and Nuseibeh (2009) and Hasni, Faridahwati, and Chowdhury (2012)	
Family member	Support from those closest to the women entrepreneurs, such as emotional encouragement, financial assistance, and the offer of their skills and expertise.	,	
Business sustainability	The frequency with which the respondents applied for financial assistance from AIM. This shows that their businesses are growing and that they are succeeding.	Interview with AIM official	

Table 2 presents the questionnaire, which consists of several sections addressing different aspects related to women's entrepreneurship. The questions were constructed to collect details about the respondent's background, their business profile, their motivation to start a business, their business obstacles, and factors contributing to their business success. The questionnaire was structured as follows:

Table 2. Details of questionnaire.

Section	Purpose	Details
Part A	To gather the demographic profile of respondents.	 Provide a brief introduction about the research's purpose and importance. Gather demographics such as age, education level, and experience in the business. Understand the motivation behind starting a business and the industry they operate in.
Part B	To assess the issues and challenges experienced by the respondents.	 This section will identify challenges experienced by women entrepreneurs during the pandemic, based on the following specific determinants: 1. Entrepreneurs' skills 2. Marketing capabilities 3. Source of funds 4. Use of technology 5. Motivation 6. Family member

This study conducted pilot testing to test the administration of the designed questionnaire on a small group of respondents from the population. A convenient random sampling method was used to select the list of women entrepreneurs quickly and cost-effectively (Kumar et al., 2012). Furthermore, this sampling method allowed for respondents from a variety of industries, business sectors, and geographic locations, resulting in a diverse sample. A total of 39 women business owners provided responses for this pilot study by completing the Google Form that was sent to them via WhatsApp. The reliability of the questions is then confirmed using their responses, which aids in the process of improvement.

4.3. Sample

The respondents of the study were selected based on the information provided in the women entrepreneur's database constructed by Amanah Ikhtiar Malaysia (AIM), the largest microcredit organization in Malaysia. This organization has a specific program to guide and assist women entrepreneurs called "Sahabat". A total of 500

respondents from this database were contacted via online tools. The process of collecting data comprised several steps. First, the AIM officer shared the chosen list of respondents, who represented several states in Malaysia, along with their names, contact information, and the type of business they were involved in. Second, the researchers created a WhatsApp group representing the states chosen for the study and invited the selected list of individual respondents to join. Finally, the researchers briefly explain the purpose of the study and begin distributing the questionnaire (created using Google Form) to each group. The actual questionnaire was distributed after the reliability of the instruments had been confirmed. The study collected 29 completed questionnaires, representing a 5.8 percent response rate.

4.4. Data Analysis

This study used SPSS software to conduct the data analysis. The data gathered was checked for accuracy and completeness. To summarize the background information on women entrepreneurs and key variables of interest, descriptive statistics such as frequencies and percentages were computed. Pearson's correlation coefficient was employed to examine the bivariate associations between individual determinants and business sustainability. This analysis aimed to identify any significant relationships that might have an impact on the research question. Lastly, a regression analysis was conducted in order to look into the relationship between the determinants of the business sustainability of women entrepreneurs' businesses.

Respondents' information		Frequency	Percent	
Age	21 - 30 years	3	10.3	
	31 - 40 years	15	51.7	
	41 - 50 years	6	20.7	
	51 years and above	5	17.2	
	Total	29	100.0	
Status	Single	1	3.4	
	Married	26	89.7	
	Divorcee	2	6.9	
	Total	29	100.0	
Educational level	Primary school	1	3.4	
	Secondary school	16	55.2	
	Certificate	1	3.4	
	Diploma	9	31.0	
	Undergraduates	2	6.9	
	Total	29	100.0	
Industry	Manufacturing	14	48.3	
	Services	12	41.4	
	Agriculture	3	10.3	
	Total	29	100.0	

Table 3. Demographic information.

5. FINDINGS AND DISCUSSION

5.1. Descriptive Analysis

Table 3 presents the descriptive analysis results of this study. According to the data, the majority of respondents (51.7%) were between the ages of 31 and 40, with respondents between the ages of 51 and older coming in second (17.2%). In terms of marital status, the majority of the respondents (26 respondents, or 89.7%) were married. Almost half of the respondents (55.2%) are secondary school certificate holders, followed by diploma holders (31.0%). Finally, most of the respondents are involved in businesses related to manufacturing (48.3%) and services (41.4%).

Table 4. Reliability analysis.

Constructs	No. of scale items	Reliability coefficient (Alpha) (n=29)
Competency	3	0.613
Marketing capability	3	0.574
Financing resources	3	0.812
Technology usage	3	0.893
Motivation	3	0.931
Family support	3	0.945

5.2. Reliability Analysis

The interpretation of Cronbach's alpha scores can be found in Table 4. Given that all the component values fall within the range of 0.5 to 0.9, it can be concluded that all the constraints exhibit an acceptable level of reliability.

Table 5. Correlation analysis.

Variables	Business sustainability	Competency	Marketing capability	Financing resources	Technology usage	Motivation	Family support
Business							
sustainability	1						
Competency	0.164	1					
Marketing capability	0.301	-0.042	1				
Financing resources	0.086	0.184	0.136	1			
Technology usage	0.381*	-0.088	0.653**	0.202	1		
Motivation	0.352	-0.057	0.701**	0.140	0.574**	1	
Family support	0.561**	0.216	0.391*	0.066	0.377*	0.380*	1

Note: Statistically significant at: *0.10; **0.05.

5.3. Correlation Analysis

Table 5 illustrates the relationship between business sustainability and the six independent variables, namely competency, marketing capability, financing resources, technology usage, motivation, and family support. With a value of 0.381, the relationship between business sustainability and technology usage was found to be statistically significant (p=0.05). Family support, also having a coefficient of 0.561, exhibited a significant correlation (p=0.00) with business sustainability, whereas competency had the lowest correlation with business sustainability at 0.164. According to the rules of correlational research, there were no multicollinearity problems because none of the correlations between competency, marketing skills, financial resources, technology use, motivation, and family support were higher than 0.90 (Hair, Black, Babin, & Anderson, 2010).

Table 6. Regression analysis.

R = 0.604
$R^2 = 0.365$
Adjusted $R^2 = 0.192$
F-value = 2.105
Sig. F: 0.094

	В	SE B	β
(Constant)	-0.509	1.508	
Competency	0.097	0.198	0.090
Marketing capability	-0.137	0.340	-0.107
Financing resources	-0.007	0.145	-0.008
Technology usage	0.251	0.285	0.209
Motivation	0.219	0.382	0.141
Family support	0.499	0.218	0.452**

Note: Statistically significant at **0.05

In this research, the influence of the six independent variables on business sustainability was assessed through a series of regression analyses. Thus, a multiple regression analysis was employed to investigate the relationship between competency, marketing capability, financing resources, technology usage, motivation, family support, and business sustainability, as illustrated in Table 6.

The adjusted R-squared value reflects the proportion of the model's independent variables that effectively contribute to a precise description of the dependent variable within the model. In this context, the R Square Change value of 0.365 signifies the business sustainability variability observed in the six independent variables examined.

Based on the results, only family support demonstrates a significant relationship (p<0.05) with business sustainability. The correlation value of family support is 0.499, and the value of β for this variable is 0.452. It is worth drawing the conclusion that there is a significant positive linear relationship between family support and business sustainability, supporting the sixth hypothesis and prior findings (Alam et al., 2011; Azmi, 2017; Kim & Ling, 2001).

All the other hypotheses (H1, H2, H3, H4, and H5) are rejected. There is no conclusive evidence between competency, marketing capability, financing resources, technology usage, and motivation with business sustainability (competency: $\beta = 0.097$, p>0.10; marketing capability: $\beta = -0.137$, p>0.10; financing resources: $\beta = -0.007$, p>0.10; technology usage: $\beta = 0.251$, p>0.10; motivation: $\beta = 0.219$, p>0.10). This is inconsistent with prior findings such as Dzisi (2008), Setini et al. (2020), Khizindar and Darley (2017), Khan et al. (2021), Amorós et al. (2021) and Alam et al. (2011). There are possibly other factors that contribute to influencing this direct relationship. As argued by Afza and Amir Rashid (2009) entrepreneurs generally and women entrepreneurs specifically are subject to many outside influential and uncontrollable elements, including social, political, and economic ones.

6. CONCLUSIONS

The purpose of this research is to examine the determinants of successful women from the perspectives of competency, marketing capability, financing resources, technology usage, motivation, and family support for business sustainability. This study found that only family support influences business sustainability, which is the ability of women entrepreneurs to survive in business during the pandemic crisis. The statistical analysis, however, did not find any relationship between business sustainability and competency, marketing capability, financing resources, technology usage, or motivation among women entrepreneurs. This implies that other elements or circumstances might have a bigger influence on their business's capacity to survive the epidemic.

7. LIMITATIONS

There are a few limitations to the study. First, the response rate is considerably low. This is possibly due to the busyness of the respondents in answering the survey. Second, some responders might not base their response on the true state of their company but rather on a socially acceptable result—namely, winning over their family members or peers. We refer to this phenomenon as social desirability bias.

8. SUGGESTION FOR FUTURE RESEARCH

In the future, research should include more samples, such as women entrepreneurs who conduct businesses, irrespective of whether they have registered with a microcredit organization or not. This will increase the sample number and, hence, the response rate. In addition, the survey instrument should also use longer Likert scales, such as seven or ten points, to derive more precise results. Finally, to obtain more detailed information on the study and richer data, qualitative methods of data collection, such as focus group interviews, could also be used.

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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